

Electricity Rate Scenarios

September 30, 2021, Demand Analysis Working Group

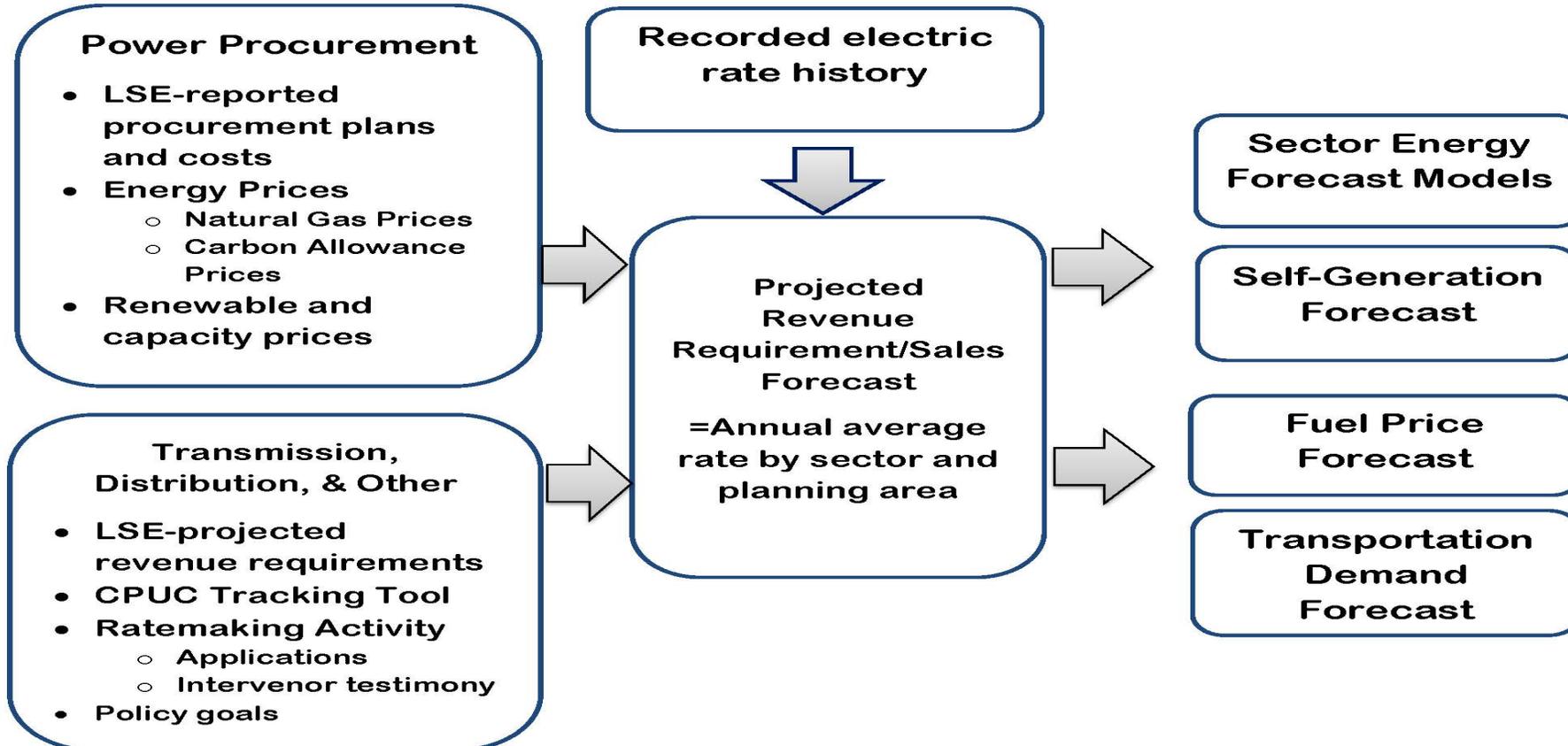


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Overview of Rate Forecast





Scenario Assumptions

Mid Case

- Mid demand, natural gas and GHG allowance prices
- Distribution revenue requirements incorporate planned costs for wildfire mitigation
- Transmission revenue requirements escalate 3.5-4% a year after planned increases.

High Demand / Low Rates

- Lower natural gas and GHG allowance prices result in lower procurement costs
- Higher sales to recover transmission, distribution and other relatively fixed costs
- Lower investment in transmission and distribution infrastructure/wildfire mitigation

Low Demand/ High Rates

- Higher natural gas and GHG allowance prices
- Lower demand means fixed costs per kwh of sales are higher
- More growth in transmission and distribution investment

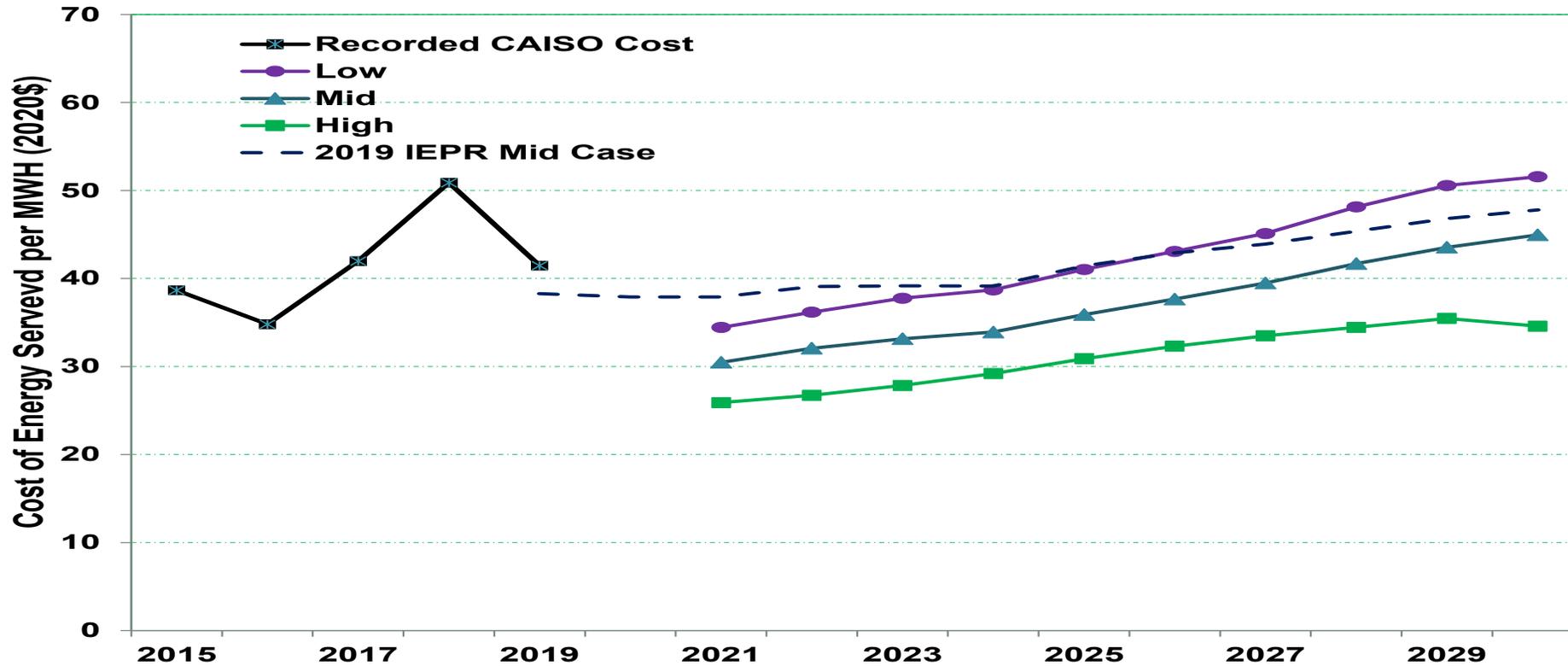


Key inputs

- Utility submitted revenue requirement projections, forecasts, and rate data; adopted rate plans.
- Updated current and prospective IOU revenue requirements using CPUC Energy Division Utility Cost & Rate Tracking Tool data.
 - Pending and recently approved applications include significant requests for wildfire mitigation capital and cost recovery.
- Utility Wildfire Mitigation Plan updates
- Wholesale electricity prices from 2020 IEPR PLEXOS preliminary results, extrapolated to 2035.
- Sales projections from 2020 IEPR, extrapolated to 2035.
- More detail on inputs and assumptions presented at the August 5, 2021 IEPR workshop:
 - <https://efiling.energy.ca.gov/getdocument.aspx?tn=239170>



Wholesale Energy Costs



- Lower natural gas and GHG allowance prices, and increased additions of renewable and storage resources, lower energy prices compared to 2019 IEPR mid case
- Growth rate is higher as gas transportation rates increase in the preliminary natural gas hub price forecast
 - <https://www.energy.ca.gov/event/workshop/2021-08/iepr-commissioner-workshop-natural-gas-market-and-demand-forecasts>



Mid-Case Residential Electricity Rates

Planning Area	\$ per kwh, 2020\$				Average Growth Rate		
	2020	2025	2030	2035	20-25	25-30	30-35
BUGL	0.19	0.19	0.19	0.20	-0.3%	0.7%	0.6%
IID	0.13	0.13	0.13	0.13	0.6%	0.5%	0.6%
LADWP	0.21	0.23	0.25	0.25	3.0%	1.8%	0.1%
NCNC	0.16	0.16	0.17	0.17	0.6%	0.6%	0.6%
PGE	0.22	0.27	0.29	0.30	5.0%	1.2%	0.8%
SCE	0.20	0.22	0.22	0.24	2.2%	0.9%	1.4%
SDGE	0.25	0.28	0.28	0.28	3.0%	0.3%	0.1%

- Slower rate of increase in publicly-owned utility (POU) areas.
- IOU areas increases are highest from 2020-2025 reflecting Wildlife Mitigation Plan implementation and disaster cost recovery
- PGE and SCE planning areas include IOU and POU customers; IOU bundled rates are higher.

BUGL=Burbank/Glendale; NCNC = BANC and TID



Mid-Case Commercial Electricity Rates

Planning Area	\$ per kwh, 2020\$				Average Growth Rate		
	2020	2025	2030	2035	20-25	25-30	30-35
BUGL	0.17	0.17	0.17	0.17	-0.3%	0.7%	0.6%
IID	0.12	0.14	0.14	0.14	2.7%	0.5%	0.6%
LADWP	0.19	0.21	0.23	0.23	3.1%	2.6%	-0.1%
NCNC	0.14	0.15	0.15	0.15	0.2%	0.6%	0.6%
PGE	0.20	0.22	0.23	0.23	2.0%	0.7%	0.6%
SCE	0.17	0.21	0.21	0.22	5.2%	0.5%	1.1%
SDGE	0.22	0.26	0.29	0.32	4.2%	2.4%	2.5%



Mid-Case Industrial Electricity Rates

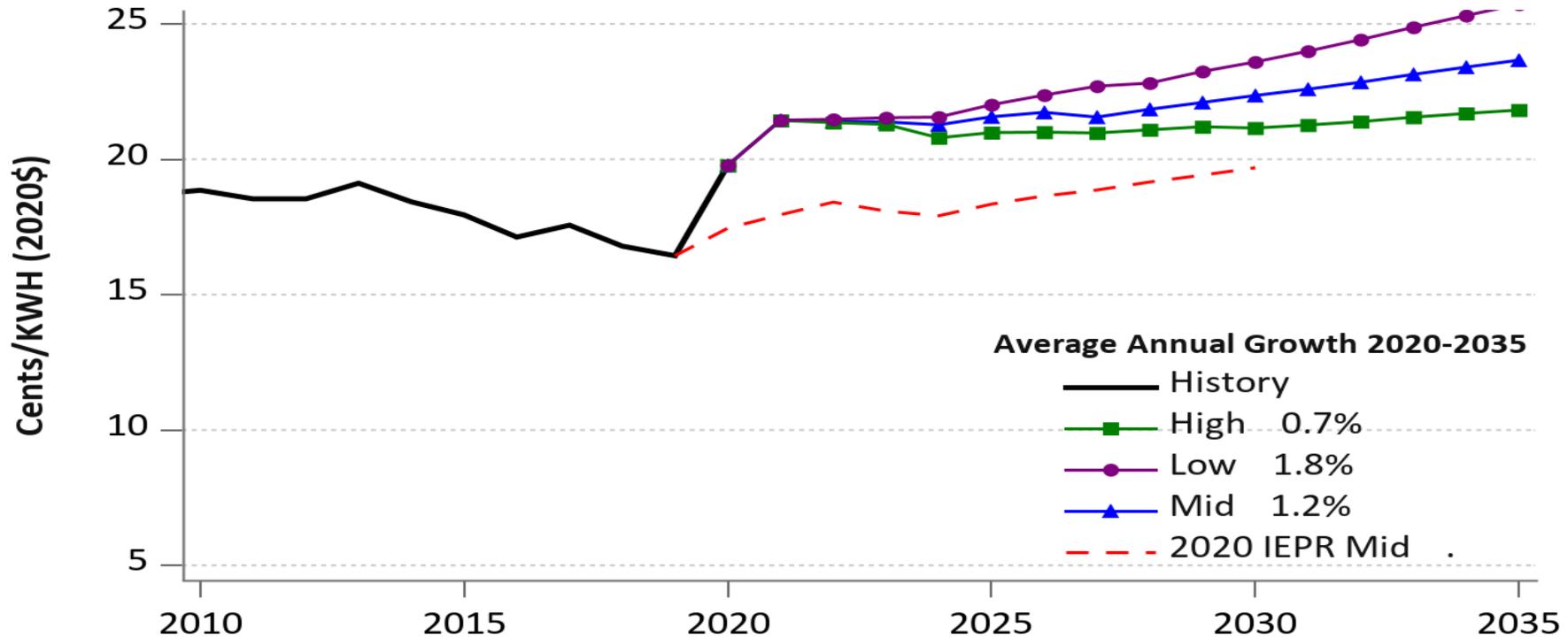
Planning Area	\$ per kwh, 2020\$				Average Growth Rate		
	2020	2025	2030	2035	20-25	25-30	30-35
BUGL	0.17	0.16	0.17	0.17	-0.3%	0.7%	0.6%
IID	0.14	0.16	0.16	0.17	2.7%	0.5%	0.6%
LADWP	0.18	0.19	0.21	0.21	2.2%	2.0%	0.1%
NCNC	0.11	0.11	0.11	0.12	0.3%	0.6%	0.6%
PGE	0.16	0.18	0.18	0.19	2.8%	0.5%	0.6%
SCE	0.13	0.14	0.14	0.14	2.1%	0.0%	0.5%
SDGE	0.18	0.18	0.18	0.19	0.3%	0.9%	1.2%

- Similar pattern but industrial customers are less impacted by distribution rate increases

BUGL=Burbank/Glendale; NCNC = BANC and TID



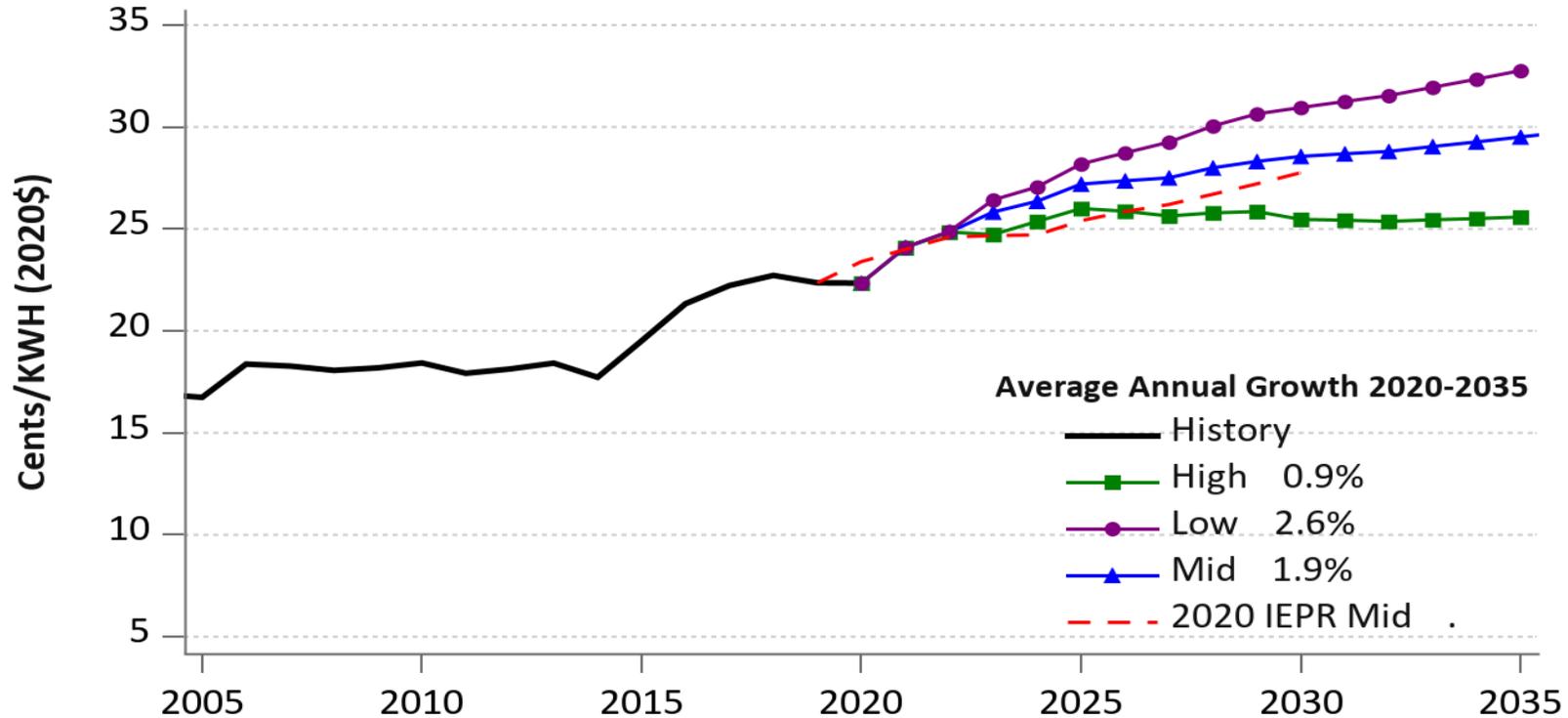
SCE Residential Electricity Rates



- 2021 GRC decision approved significantly higher spending for wildfire mitigation, with 5.5% and 6% increases in revenue requirements for 2021 and 2022. This is offset in 2022 by an expected decrease in procurement costs.
- Mid-case scenario assumes spending on the approved level of wildfire mitigation infrastructure activity persists through 2027, followed by increased spending on deferred distribution infrastructure replacement.



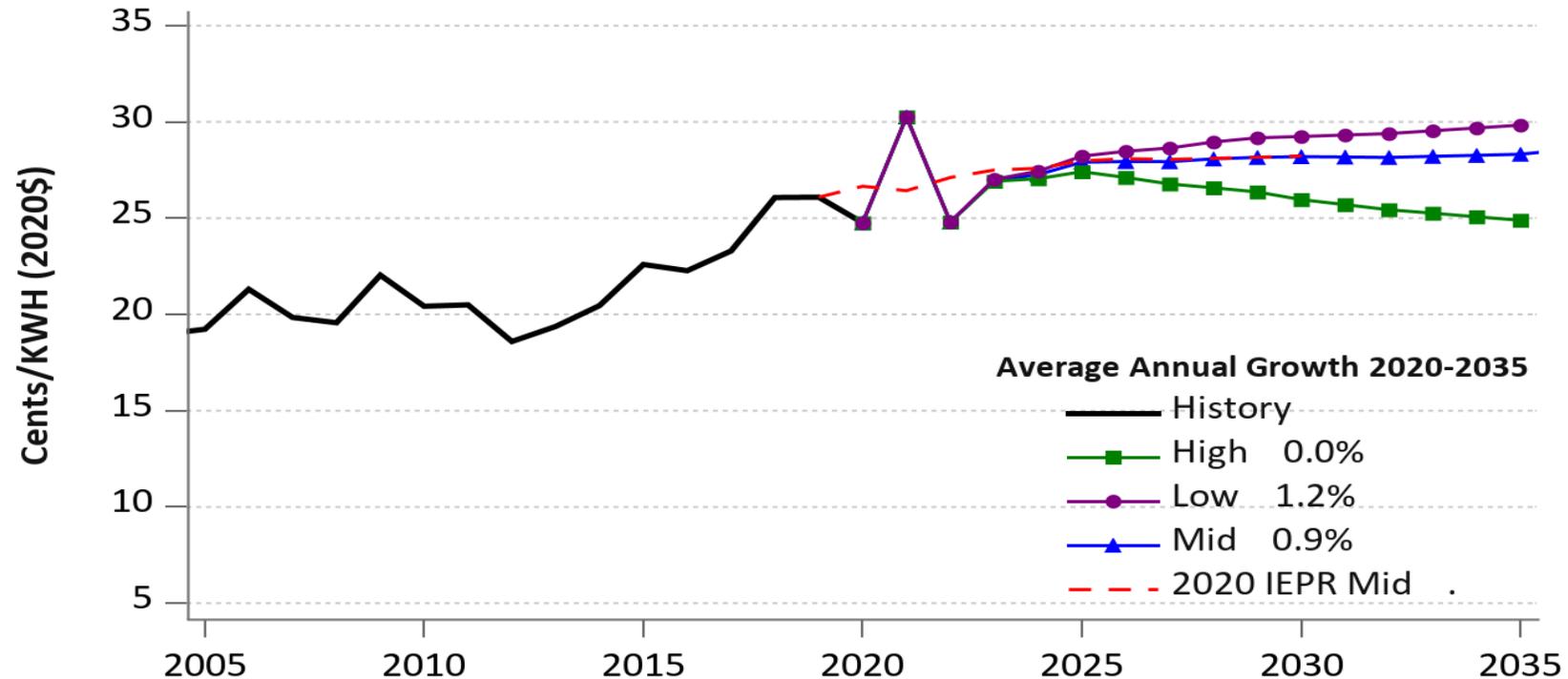
PG&E Residential Electricity Rates



- PG&E's 2023 GRC application requests a 48% increase in distribution revenue requirements to implement WMP activities. For this forecast, the mid-case distribution revenue requirement is assumed to increase about 6% annually through 2027, then decreases to 4% annually.



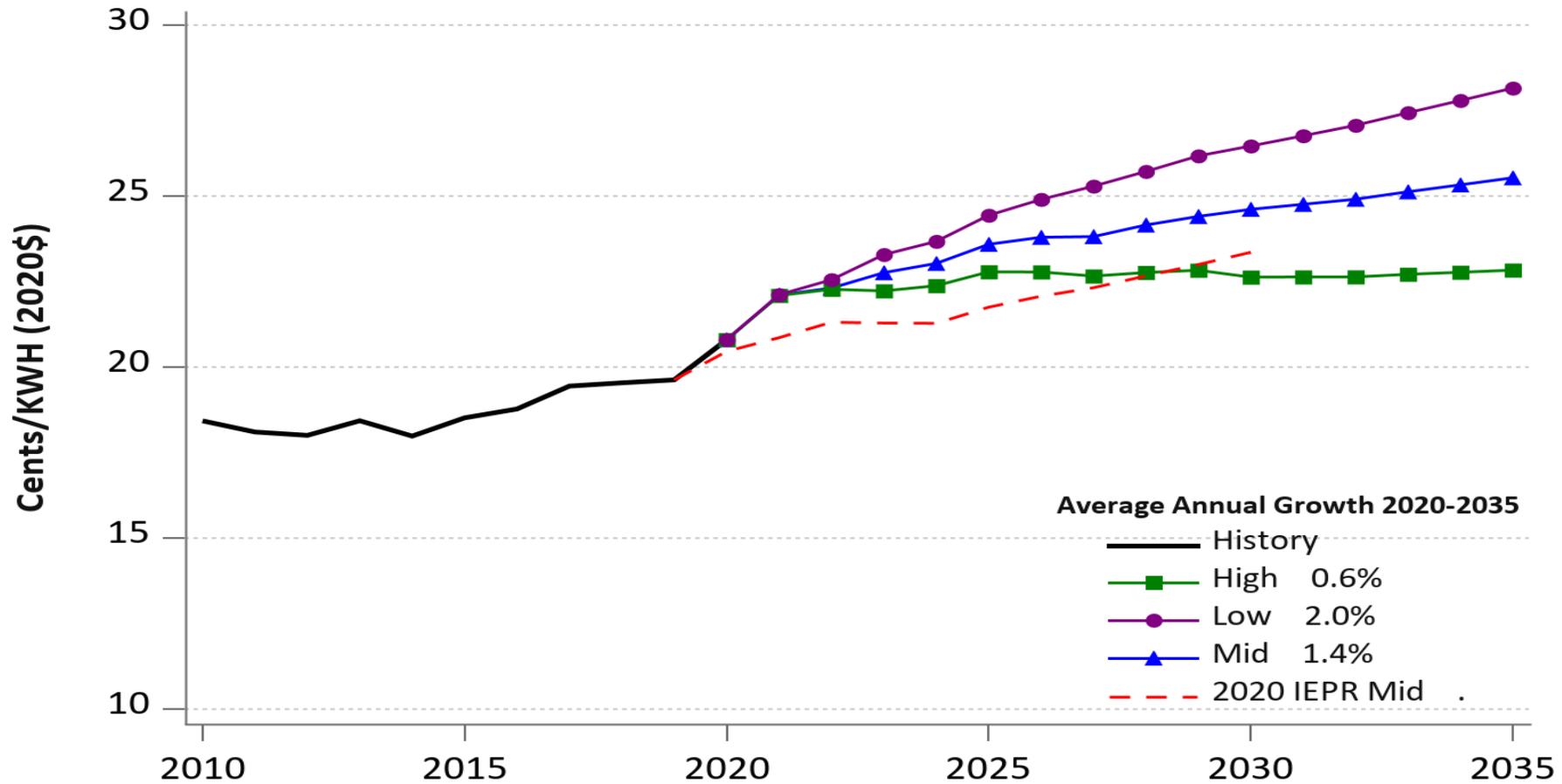
SDGE Residential Electricity Rates



- SDG&E'S recent application for wildfire cost recovery indicate rate increases of about 2%. The SDGE 2021 Wildfire Mitigation Plan discusses pilot studies that could be expanded in next GRC.



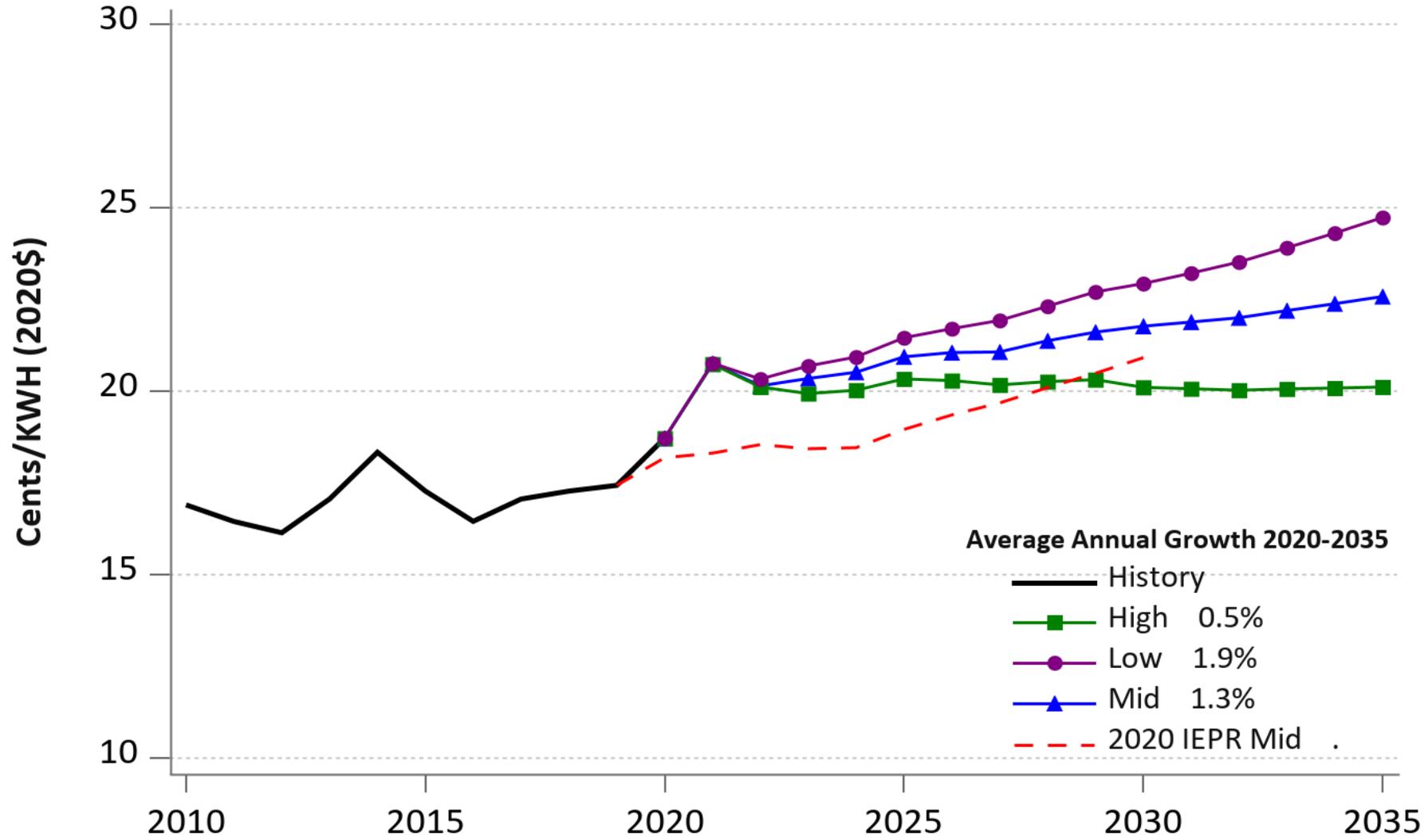
Statewide Average Residential Electricity



- Statewide rates are used by staff transportation demand forecasting models



Statewide Average Commercial Electric Rates





Statewide Average Industrial Electric Rates

